Enhancing Education Through Technology (EETT)
Competitive Sub-grant Application Assurance Sheet

Project Title: Wired For Literacy Amount of Request: $ 75,000

District Name (Fiscal Agent for Consortiums): Mountain View School District Number: 244

Please list the school name, and indicate whether it is a targeted school or a partner school and certify the CIPA compliance for all participating schools within the project:

Dist. # or 'P' for Private School	School Name	This school is a targeted school 'T' or a partner school 'P'.	This school is in compliance with the CIPA as outlined on page 3 of the guidance document.
244	Clearwater Valley Junior/Senior High School	T	YES
244	Clearwater Valley Elementary School	T	YES
244	Grangeville High School	P	YES
244	Grangeville Elementary/Middle School	T	YES

I certify that we have contacted the charter and private schools in our area about participation in this grant.

Superintendent Name	E-mail	Telephone
Wayne R. Davis	davisw@sd244.org	983-0990
Signature		
District Technology Coordinator Name	E-mail	Telephone
Tim O'Connor	oconnort@sd244.org	983-0990
Signature		
Project Director Name (if different than District Technology Coordinator)	E-mail	Telephone
Meleah McCulley	mcculleym@sd244.org	983-0400
Signature		

Abstract

Mountain View School District #244 (SD #244) promotes increased academic achievement through the use of technology in the classroom. The district is committed to acquiring current technology in order to better prepare students for future education and/or employment opportunities. To keep this vision, the **Wired for Literacy** grant would allow acquisition of new equipment and implement technology training that is currently beyond our resources.

Wired for Literacy would allow an opportunity for district language arts teachers to improve student academic achievement through the use of technology. Schools in our district did not meet AYP eligibility, mostly in reading areas. Also, the district average for the 2007 language arts ISAT scores has dramatically dropped, especially in comparison to other district ISAT scores. In order to make necessary improvements, teachers need opportunities to refocus the curriculum and make necessary updates, especially in the area of technology literacy. Most of the district's language arts classrooms are equipped with ancient overhead projectors and one or two computers with internet access. Because of this, teachers struggle to present information using digital or other audio-visual media. The low computer-to-student ratio further limits student learning opportunities.

Wired for Literacy would place visual presenters and projectors, DVD/VHS players, new sound systems, and updated computer systems within the language arts classrooms throughout the district. With this new technology in place, teachers would be able to develop new teaching strategies for technology literacy, as well as all areas of the language arts curriculum.

Wired for Literacy would allow teachers to boost student achievement in developing research skills, editing student writing, and providing a link between literary themes and the world today. Installation of the visual presenters with projection systems in our classrooms will provide a means to demonstrate computer applications and share audio/visual materials. The visual presenters will allow teachers to engage students more effectively in the writing process by presenting student work on a large screen for peer editing demonstrations. Teachers will be able to model such skills as writing techniques, note taking, research skills, and various comprehension strategies in an interesting format. The projectors will improve student academic achievement through facilitating up- to-date research skills via the internet. It will also allow students to view and analyze a variety of sources such as student writing, texts, illustrations, photographs, and the myriad of internet materials.

This grant will be a launching point for a quarterly teacher collaboration meeting to exchange innovative ideas and optimal usage of the new technology. The CLAM (Collaborative Language Arts Mentor) team plans to add a web page to the district web site to help foster communication between teachers, parents, and students.

Student's language arts skills will significantly impact their success in other academic arenas since other curricula heavily depend upon a mastery of reading and writing skills. In addition, by increasing student's technological skills, students will enjoy greater opportunity for advancement in today's job market.

Educational Need

Wired for Literacy will improve student achievement by upgrading language arts classrooms in SD #244 with enhanced technologies. This will facilitate improvement of language ISAT scores at all schools. Our district's 7th through 10th grade students ranked low with scores ranging in the 51-59% proficiency level in the spring 2007 language ISAT scores. Three out of the four schools directly involved in the grant proposal are "AYP targeted" schools. GHS, the one "non-targeted school," will receive "AYP targeted" students by the fall of 2008. In the chart below, notice the discrepancy between reading and language arts scores for the same students.

Spring ISAT '07	Grade 7		Grade 8		Grade 9		Grade 10	
	Reading	L. Arts	Reading	L. Arts	Reading	L. Arts	Reading	L. Arts
District Summary: % of Students Proficient or Above	74.8	56.8	86	50.9	90.3	53.1	80.7	58.7

Forty-one percent of students in our district meet free or reduced lunch criteria, indicating low economic status. These same students have minimal access to technology within their own homes. Our schools suffer from a 16% absenteeism rate (rates taken from August - October of the current school calendar). Students who can link the relevance of the subject matter to today's world might be more prone to attend school. Increased numbers of students dropping out fuel our desire to keep students actively engaged in the learning process. We believe the use of technology will boost student learning.

Currently, all of our district's language arts classrooms do not have projection equipment. The low computer-to-student ratio limits student-learning opportunities. Without **Wired for Literacy,** our lack of technology will impede language arts teachers in SD #244 in their efforts to improve student achievement. **Wired for Literacy** will greatly improve student editing, composition skills, researching techniques and comprehension strategies. In order to successfully accomplish these goals, the teachers will need professional development to ensure the new systems benefit students in the district.

Wired for Literacy capitalizes on the strengths of today's students dubbed Generation M due to their frequent use of media. Educational trends show that 70% of teachers who bi-weekly use video in their classrooms discovered that students' motivation increases. In addition, fifty percent of these same teachers discover that student viewers increase their vocabularies.

Along with increasing student motivation, use of visual materials aids students in various ways: it enlivens and reinforces reading and lecture assignments, it helps develop a common base of knowledge, it improves both comprehension and discussion, and finally it adjusts for a greater variety of learning skills. Clearly, visual materials benefit visually-oriented learners who learn via processing information holistically and in a three-dimensional fashion. It also aids auditory-sequential learners who learn by listening and processing information in a step-by-step fashion (Corporation for Public Broadcasting, 1997, Denning). In fact students and adults alike

remember 50% of what they hear and see as opposed to 10% of what they read, 20% of what they hear and 30% of what they see. Because videos and television involved not only students' cognitive levels, but emotional ones as well, visual strategies have more appeal. Videos can pique a student's interest in a topic, allow him to concentrate more fully, and engage his emotions more effectively than print matter (Marshall 2002).

Studies indicate that the use of video to "anchor" instruction resulted in increased vocabulary, improved understanding of plot and characterization, and better inferential skills. Additional studies cite that students who viewed instructional television in eighth grade classrooms performed better than control groups in test taking, writing, solving problems creatively, and participating in classroom discussion (Barron, 1989).

Even though most students spend more than 25% daily using media they may not be literate in processing visual information. It is incumbent upon teachers to impart skills so that students learn to critically view material and ascertain its reliability. One study indicates that critical analysis of print, audio, and visual media led to improved reading and writing skills in a wide variety of texts. In fact, a 2006 study funded by the U.S. Department of Education indicates that media literacy extends far beyond the language arts classrooms to all CORE-curricula (Barnes, 1997). The impact of **Wired for Literacy** would be felt throughout the school environment affecting a more positive learning environment and increased student skills in all CORE subjects.

Barnes, B., ed., (1997). *The power of classroom TV: A marketing and advocacy document for the use of classroom television professionals*. NETA Center for Instructional Communication. October 1997.

Barron, L. (1989). Enhancing learning in at-risk students: Applications of video technology. ERIC Digest. Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills.

Corporation for Public Broadcasting. (1997). *Student of school uses of television and video*. 1996-1997 School year summary report. (ERIC Document Reproduction Service No. ED 413 879)

Denning, David. (No date). *Video in theory and practice: issues for classroom use and teacher video evaluation.* Available: http://www.ebiomedia.com

Marshal, J. M. (2002). Learning with technology: Evidence that technology can, and does, support learning. White paper prepared for Cable in the Classroom.

Local Project Details

Wired for Literacy will increase student-teacher interaction by promoting positive learning environments in all language arts classrooms throughout the district, grades 7 – 12. The grant also encompasses visual presenter/projector systems for the elementary tech labs for use by the elementary language arts teachers. Technological upgrades will allow teachers and students to interact with current events, literature and author studies, research sites, and many other multi-media resources available for reading and critical thinking skills. Also, teachers and students will be able to visually present or demonstrate any of the steps in the writing process: gathering viable facts and information, prewriting, organizing, editing for spelling and grammar, or rewriting drafts to adjust for the audience in any form of written communication.

Plan and Time Line for Project Implementation

January, 2008:

- Organize first CLAM (Collaborative Language Arts Mentor) meeting:
  - Invite language arts representatives from each participating school.
  - Review **Wired for Literacy** grant goals and objectives.
  - Choose 3 CLAM tech leaders for the district. These leaders will later assist other teachers in the implementation of the new equipment and pedagogy strategies.
  - Choose 2 CLAM representatives to attend the evaluation in-service.
- Order projector systems and visual presenter packages.
- Clarify installation needs/requests with district electricians.

February - March, 2008:

- Install projectors and visual presenters
- CLAM tech leaders receive training from hardware representatives.
- CLAM tech leaders meet with U of I support personnel, receiving training on effective instructional strategies using technology in the language arts classroom; teacher training on the National Educational Technology Standards.
- Begin collection of evaluation data for language arts teachers' pre-training performance levels. Collect information on current use of technology and on methods for engaging students in the subject matter.
- CLAM representatives attend one-day evaluation in-service in Boise.

April, 2008

- Full day training for all district language arts instructors on the use of projectors and visual presenters.
  - The CLAM tech leaders will provide the training, with guidance from U of I.
  - Professional Development Credits will be organized through U of I.

May, 2008

- Language arts teachers will set a goal to complete 3 lessons using the new equipment.
- Teachers will develop pre/post student evaluations to use with lessons.
- CLAM tech leaders will be available to help teachers.

June, 2008

- Second CLAM meeting:
  - Analyze feedback from May lessons.
  - Define goals/objectives for language arts for 2008-2009 school year.

Summer, 2008

- CLAM teachers will develop a web page, linked to the district web site, to facilitate learning needs, frequently asked questions, and shared student literary experiences between schools. There will also be a discussion board set-up for teachers to post lessons and ideas to promote continued collaboration. This will be included as part of the professional development.

September-November, 2008

- Set schedule for Quarterly CLAM meetings.
- Interim data report of evaluation data from U of I.

January, 2009

- Summary of evaluation data will be distributed to participating instructors.

February, 2009

- Evaluation discussion meeting will be held for all instructors involved.

May, 2009

- Final evaluation report will be written and delivered to all participants.

Primary Goals

- Provide students opportunities to gain a better understanding and comprehension of language arts skills and concepts through technology (SD #244 Technology Plan, goals 3 & 5).
- Provide all students an equal opportunity to participate in technology-enhanced learning and increase the quality time they spend performing language arts activities (SD #244 Technology Plan, goal 3).
- Expand student access to technology-based resources that would not otherwise be available in a traditional classroom setting.
- Help educators collaborate with peers, administration, and community members to create useful lesson plans and activities (SD #244 Technology Plan, goal 5).
- Provide teachers with the training, tools, and materials necessary to take advantage of the software, audio/visual equipment, and assortment of language arts-based resources for the benefit of student learning (SD #244 Technology Plan, goals 4 & 5).
- Meet language arts educators' needs for quality professional development and training within their own school district (SD #244 Technology Plan, goal 5).

Measurable Objectives

- Teachers will demonstrate a basic use of the visual presenters and projectors.
- Teachers will effectively incorporate technology into classroom pedagogy.
- Students who are not proficient in language arts will meet their growth target by spring 2009 as measured by ISAT scores, end of course assessments, classroom performance, and classroom assessments.

Evaluation Plan

Project evaluation will serve three purposes, including: (1) Provide information by which decisions can be made as to the continuation, modification, or elimination of various project procedures and activities; and (2) Provide information regarding the degree to which goals and objectives are reached; and, (3) Promote sustainable changes in practice.

Dr. Tim Ewers from the University of Idaho will conduct the project evaluation. See his complete summary of the evaluation process in Appendix A.

Sustainability

Wired for Literacy will lay the groundwork for improvements in the district language arts program at all levels, especially in the area of technology literacy for both teachers and students.

It is difficult to access immediate support in our remote, rural school district. By implementing the "in-house expertise" model, using teachers as CLAM tech leaders, the district will increase the effective use of technology. In addition, the development of CLAM (Collaborative Language Arts Mentors) will allow future collaborative opportunities. In these quarterly meetings, language arts teachers will continue to share and develop teaching strategies with colleagues.

Each participating school has a building technology coordinator on hand for hardware support as well as district maintenance personnel. The continual cost for consumables such as replacement bulbs and batteries will be borne by the district as part of its maintenance budget.

In an effort to meet technology goals during the last textbook adoption, SD #244 purchased curricular materials that integrate reading and writing. This curriculum also provides software and DVD's that could be fully utilized through **Wired for Literacy**. SD #244 has a commitment to improve learning in all curricular areas. A cycle of curricular review exists so that each year one area is scrutinized and updated. Since **Wired for Literacy** will become an extension of a curricular adoption, it will fit nicely in our renewal cycle.

Budget Narrative

****No administrative costs will be used for this grant.****

1. Equipment

a. Visual presenters: Elmo TT-O2s (14) . . . . . ($680.00 each) $9,520
Visual presenters allow teachers to utilize a wide range of texts, written material, illustrations, photographs, and other materials for whole-class presentations. This new model has microscope capabilities and a SD Card Slot for digital memory sticks from cameras.

b. LCD XGA projectors: Boxlight CD737x (13) . . .($1,159 each) $15,067
The projection system mounts to the ceiling and connects to the classroom computer, visual presenter, and audio/visual equipment. One teacher already has a projector.

c. Sony SLVD380P DVD/VHS players (13) . . . ($100 each) . . . . . $ 1,300
Teachers will be able to play materials already purchased as part of the current curriculum.

d. Sony HTDDW990 Home Theater Systems (13) . . ($270 each) . . . . . $ 3,510
Surround sound will provide audio for the entire class rather than trying to listen with existing computer speakers.

e. Da-lite Screens 85316; Model B W/CSR 100D 60 x 80 (13) . . . .($190 each) . . . . . $ 2,470
Larger screens are needed to provide clarity in presentations. These will be mounted.

f. Dell GX745 (8) . . . . ($1,100 each) . . . . . $ 8,800
Classrooms at the AYP targeted schools need new computers to run the additional technology.

g. Mounting Kits for Projectors, cables and other peripherals $3,000
The projection systems mount to the ceiling with specialized mounting brackets. Cables will run to a custom-designed cart that will contain the visual presenter, computer, and sound system.

h. 2G Flash Drives (14) . . . . . ($50 each) . . . . . $ 700
Language arts teachers constantly find graphics, text, and video clips that they need to transfer from one computer to another.

i. Language Arts Software $2,500
In addition to existing software purchased with text books, new software is now available to upgrade language arts remedial classes.

2. Professional Development $18,750
CLAM representatives will attend the evaluation in-service in Boise. CLAM tech leaders will receive training from U of I for effective instructional strategies using technology in the language arts classroom. Tech leaders will receive ½ day training on new hardware. All grantees will receive a full day training session from technology leaders. The grant will cover transportation, substitute teacher costs, and other accommodations as needed. CLAM tech leaders and other mentors will receive honorarium for hours worked outside of the school day to help other language arts teachers, to build the web page, or to prepare for training workshops.

Budget Narrative

3. Evaluation

University of Idaho Evaluation $4,000

Dr. Tim Ewers of the Center for Evaluation, Research and Public Service will conduct the evaluation for the University of Idaho. Dr. Ewers has a background in quantitative research and evaluation. The evaluation fee covers salary, communications, travel, and printing of reports.

4. Installation and Construction of Audio/Visual Stations $5,383

Individually designed stations will house the Elmo presenters, the computers, and multimedia hubs. Installation includes wiring raceways, making shelves for speakers, and attaching ceiling mounts to a variety of ceiling types throughout the district. Each school has unique situations for handling the new technology that will be solved by the language arts teachers, administrators, and district maintenance personnel.

Total Request: $75,000

Appendix A:
Summary of Project Evaluation

The **Wired for Literacy** projected will be evaluated in the following four areas:

1. Installation of the Technology.
   - Was the technology properly installed and in a timely manner to allow teachers to use it effectively?

Measurement: The project team will report the progress of procuring and installing the technology with respect to the project timeline. This narrative data will provide a history of the project. Timely installation of the technology is critical to the effectiveness of the whole project.

2. Effective Teacher Use of the Technology (Goals 5 and 6, Objectives 1 and 2).
   - Can trained teachers use the technology? Are they comfortable in the use of the technology in their classrooms?
   - Based on the national Educational Technology Standards, do teachers appropriately and effectively use the technology to enhance their instruction and student engagement?

Measurement: Teachers will conduct a lesson demonstrating their effective and appropriate use of the technology. The lesson will be monitored by the evaluator and a CLAM colleague and compared against an ISTE NETS Evaluation Instrument, which provides specific feedback in lesson design and delivery. Teachers will provide a written response to the evaluation indicating their level of agreement/disagreement with the evaluation and if and how they will use the feedback.

3. Institutionalization of change in practice as a result of the Wired for Literacy project (Goal 4).
   - Have teachers formed a functional mentoring group? Have teachers developed the expertise within their team to sustain changes made during the project? What value do teachers and administrators see in CLAM and the **Wired for Literacy** project?

Measurement: An anonymous survey will be used to collect administrator and teacher perspectives on the effectiveness and value of CLAM. How well does it function? What changes in your practice are a result of CLAM?

4. Student engagement and learning resulting from the use of the technology (Goals 1, 2, 3 and Objective 3).

Measurement: Pre/Post analysis of student questionnaire about their engagement and interest in the course and their perspective on the use of the technology and how it helped, hindered, or had no impact on their learning the subject matter. In addition, the CLAM mentor group will provide an analysis on the quality of the student work pre and post implementation of the **Wired for Literacy** project. Teachers will also respond to a questionnaire giving their perspectives on how the technology impacted student engagement in their classrooms and the degree to which the use of the technology impacted their ability to enhance student experience with the subject.